

From: susan.jablonski@tceq.texas.gov
Sent: Tuesday, September 19, 2017 3:40 PM
To: Vargo, Steve
Cc: Crossland, Ronnie; Ramiro Garcia; Kelly Cook
Subject: RE: Follow-up on USTs in 58 impacted counties

Based on our follow-up discussion just now, you asked us to look at an overall percentage of all potentially-impacted UST facilities that may need assessment and possible clean-up. While we have not done assessments on-site to verify, a very rough number would be 5% of all facilities needing some level of attention. If we use our rough dollar figure of \$155,000 (with 5% for initial assessment), 5% would be approximately 400 facilities, with a total rough estimated cost of \$62 million.

From: Susan Jablonski
Sent: Tuesday, September 19, 2017 3:03 PM
To: 'Vargo, Steve' <Vargo.Steve@epa.gov>
Cc: 'Crossland, Ronnie' <Crossland.Ronnie@epa.gov>; Ramiro Garcia <Ramiro.Garcia@tceq.texas.gov>; Kelly Cook <Kelly.Cook@tceq.texas.gov>
Subject: RE: Follow-up on USTs in 58 impacted counties

Good afternoon, Steve.

I know we are cutting your deadline tight but here is what we put together:

Underground Storage Tanks (USTs) Potentially Impacted by Hurricane Harvey

There are approximately 8,015 USTs in the 58 affected Texas counties identified by Governor Abbott's Proclamation.

The greatest potential for impacts includes those UST facilities that were in the direct path of hurricane force winds and those in areas of extreme flooding. Some USTs facilities have not been accessed yet due to persisting flooding or other unsafe conditions.

As an example, in TCEQ's Region 14 – Corpus Christi area, there were 15 counties with severe to minor impacts that are home to 757 UST facilities with 1,945 tanks. In the most impacted counties where Hurricane Harvey first made landfall, such as Aransas, Refugio, and San Patricio counties, it is estimated that 80% of the UST facilities sustained potentially-significant damage. These figures range from 50% to 5% throughout the remainder of TCEQ Region 14 counties. For TCEQ's Region 12 – Houston and Region 10 – Beaumont, extreme flooding impacts to UST facilities are more likely. With Harris County being home to almost 3,000 UST facilities with 6,698 tanks, even if 5% of that facilities had impacts that could equate to 150 UST facilities needing assessment and clean-up in Harris County alone.

Here are some rough costs estimated by remediation staff based on past experience:

- Initial Assessment to Categorize –\$5,000 (not all 8,015 potentially-impacted USTs will have responsible parties that can do this assessment, leaving these to be performed by the State)
- Average Facility Full Assessment –\$30,000 - \$50,000
- Cleanup (if an engineered systems is needed to address the contamination) - \$120,000/ per year (systems operation and maintenance needs may vary and can range from 7 – 15 yrs)
- Groundwater monitoring - \$30,000/per year (monitoring activities will vary on a case-by-case basis but can range from 5 – 10 yrs)

- In very rough numbers, \$150,000 for addressing the assessment and first year clean-up of a facility with minor damage and leaking product.

Please note that cost estimates could be highly variable as initial assessments have not yet begun in the affected counties. Any funding opportunity would also have to be considered by Texas based on grant terms, including potential state-matching requirements that might not be available for these targeted activities.

From: Vargo, Steve [<mailto:Vargo.Steve@epa.gov>]
Sent: Tuesday, September 19, 2017 1:48 PM
To: Susan Jablonski <susan.jablonski@tceq.texas.gov>
Subject: RE: Follow-up on USTs in 58 impacted counties

Earlier would be better, I will probably need to work it through the management chain here before we send it in

From: Susan Jablonski [<mailto:susan.jablonski@tceq.texas.gov>]
Sent: Tuesday, September 19, 2017 1:32 PM
To: Vargo, Steve <Vargo.Steve@epa.gov>
Subject: Re: Follow-up on USTs in 58 impacted counties

Thank you for letting me know, Steve

Sent from my iPhone

On Sep 19, 2017, at 12:30 PM, Vargo, Steve <Vargo.Steve@epa.gov> wrote:

Susan the 4 PM deadline is 4 PM Eastern. So, 3 PM our time

From: Susan Jablonski [<mailto:susan.jablonski@tceq.texas.gov>]
Sent: Monday, September 11, 2017 4:33 PM
To: Vargo, Steve <Vargo.Steve@epa.gov>
Cc: Michelle Harris <michelle.harris@tceq.texas.gov>
Subject: RE: Follow-up on USTs in 58 impacted counties

Good afternoon, Steve.

Please find attached the list of USTs in the impacted counties in Texas. I apologize that I couldn't speak with you myself last week as the days have not been long enough here since Harvey impacts began. Thank you for looking out for Texas and requesting assistance on our behalf. Please let me know anything additional you may need.

Thank you again,
Susan